ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN

DYNAMIC GAINS FROM INTRAREGIONAL TRADE IN LATIN AMERICA

Rudolf Buitelaar*
Joint ECLAC/UNIDO Industrial and Technological Development Unit
Division of Production, Productivity and Management

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* Staff member of the Joint ECLAC/UNIDO Industrial and Technological Development Unit of the Division of Production, Productivity and Management of ECLAC. The paper is the exclusive responsibility of the author and does not necessarily reflect the opinions of ECLAC. The author wishes to thank Zaida Soto and Jaime Contador for their help in obtaining and organizing the data; Marco Dini for his advice on the design of the graphs; Graciela Moguillansky and Daniel Titelman for their advice on statistical analysis; and Juan Alberto Fuentes, Gérard Fichet, Miguel Izam and Joseph Ramos for their useful comments on earlier drafts.

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I. INTRODUCTION

There are some powerful reasons to expect a significant increase in trade flows between countries in Latin America in the near future. During the past decade, the region has shown a remarkable export performance, triggered by the debt crisis. A change in development strategies and economic policies has taken shape; inward-looking industrialization regimes are passing through a stabilization phase and moving towards an export-led reactivation model of economic development. Imports were sluggish in most countries in the 1980s due to the severe constraints on payment capacity. As a result, intraregional trade was less dynamic than extraregional trade for Latin America in the 1980s. The reactivation of the economies of the region will reverse this trend.

In this context, the Enterprise for the Americas Initiative and the NAFTA negotiations fuelled an awareness among governments of the region that they should prepare their economies to compete in more open markets. A host of subregional and bilateral trade discussions between countries in Latin America are likely to increase trade in the coming years, even if the NAFTA negotiations and other trade agreements take more time than initially expected, and despite the fact that effective integration between countries in Latin America is likely to be a cumbersome process.

The debate over trade policy involves the question of whether intraregional trade should be promoted explicitly. This paper explores some possible dynamic effects of an increase in intraregional trade on the production structure and capacity of the region.

Arguably the most important dynamic gain of increased intraregional trade would be an improved growth rate of the economies of the region. This argument derives from the observation that there is a strong correlation between the growth in exports of manufactures and the growth rate of gross domestic product (GDP) and from the fact that manufactures account for a bigger share of trade between less developed countries (LDCs) than of trade between LDCs and industrialized countries. J. Arthur Lewis suggested something similar in his Nobel speech —he observed that imports of manufactures by industrialized countries are in the long run less dynamic than imports of manufactures by LDCs.

According to this line of reasoning, intra-LDC trade should therefore be stimulated in order to improve the prospects for a steadier increase in LDC manufactured exports and hence improve growth prospects. In this paper, however, we analyse other dynamic effects of regional integration that have been suggested in the literature. Earlier studies (see e.g. ECLAC, 1959 1/) concentrate mainly upon the

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1/ ECLAC, The Latin American Common Market (E/CN.12/531, Santiago, Chile, 1959. United Nations publication, Sales No. 59.II.G.4.

acceleration of the industrialization process and the lowering of external vulnerability of the countries in Latin America. Recent studies (see e.g. ECLAC, 1990 2/) concentrate upon the stimulation of local technological capabilities —as the production of goods traded within the region is technologically more demanding than that of those traded extraregionally— and a more solid and diversified international position for the countries of the region. These are the kind of effects this paper will investigate.

The key questions in this exploration refer to the structure and dynamics of production and trade, making a distinction between the relationships among Latin American countries and between Latin America and the outside world. First, is a development strategy that pursues intraregional integration among developing countries different from a global export-led development strategy? The hypothesis proposes that it is part of the same strategy —that integration among Latin American countries is one part of a global opening-up strategy that pursues a general export-led growth. Second, are there differences between the composition of trade flows among Latin American countries and the composition of trade flows between Latin American countries and the rest of the world?

What follows is a presentation of the data used in the research, together with a global view of the structure of production and trade and the recent transformations thereof. This is followed by two regression analyses. The first explores the relation between the intraregional export performance, the extraregional export performance, and external dependency. It concludes that good intraregional performance and good extraregional performance are compatible, as are strong intraregional trade and an important degree of openness towards the outside world. These conclusions may help economic policy makers avoid past mistakes.

The second regression analysis explores the relation between the degree of intra-industry trade and the pattern of each trade flow. It presents convincing evidence that the degree of intra-industry trade increases with a greater intraregional export performance and decreases with a greater extraregional export performance. This finding implies that intraregional trade has different characteristics and may be seen as complementary to extraregional export performance. This may spur discussion on taking positive action to stimulate regional integration.

The next section examines in more detail the main product groups that have an important share in intraregional exports. The data are presented in a two-by-two graph, establishing on the x-axis whether production is domestic-market oriented or export-oriented, and on the y-axis whether trade is intraregionally or extraregionally oriented. It defines as "industries of regional integration" those that are export-oriented and relatively more focused on the regional markets. The main sectors are chemical products, transport equipment and non-electrical machinery. The section examines further the competitive position of the different countries per sector.

The last section presents the main conclusions: the regional market offers opportunities to develop industrial exports that are likely to have important technological learning effects. A case can be made that regional integration should be promoted by explicit policy measures, complementary to extraregional trade and not opposed to it, because openness of markets to third parties goes hand in hand with improved intraregional export performances.

2/ ECLAC, Changing Production Patterns with Social Equity: The Prime Task of Latin American and Caribbean Development in the 1990s (LC/G.1601-P), Santiago, Chile, March 1990. United Nations publication, Sales No.E.90.II.G.6.

II. PRESENTATION OF THE DATA AND SOME GLOBAL FACTS

1. The data

The type of analysis proposed here requires the combination of production with trade data. The data on gross production value (GPV, also referred to as output) and employment were taken from the UNIDO Industrial Statistics Data Base at the three-digit ISIC level in national currency. The United Nations Comtrade database provides data on trade, in current dollars, that were transformed from the SITC classification to the three-digit ISIC level through the TARS software program. The three-digit ISIC level is composed of 28 production sectors that can be considered part of the "manufacturing industry" in a broad sense (annex 1). Included here are food products, refined oil and semi-manufactures of basic minerals (normally excluded from the definition of manufacturing industry) in order to provide as broad a picture as possible of trade in goods. ISIC chapter 3 goods account for 64-77 percent of total exports of goods in 13 countries selected for detailed analysis.

An effort was made to include every economy in Latin America and the Caribbean in the analysis. Of the 25 countries with some available data, it was possible to construct a complete set of variables for only 13 for the periods 1978-1980 and 1988-1990. The three-year averages were calculated to improve comparability and presentation. It must be noted that data on intraregional trade include all trade of the 13 countries within the region (the original 25 countries). These 13 countries account for around 94 percent of regional GPV, 90 percent of employment in the industries considered, and about 80 percent of regional trade.3/ The overall representative quality of these countries is therefore satisfactory.

These data present two important problems, neither of which can be solved entirely —the over and undervaluation of national currencies and the changes in relative prices between products. The data in national currencies have been changed to current dollars using the IMF "rf" (market) exchange rate, and a correction factor has been applied to adjust for periodic overvaluation and undervaluation of currencies. This factor was calculated by estimating the trend in the Index of the Real Effective Exchange Rate (IREER, which compares national inflation with dollar inflation), and dividing the actually observed IREER by the estimated trend value. This amounts to (downward) adjustments as high as 40 percent, as in the case of Argentina for the period 1978-1980.

The problem of fluctuating relative prices should be addressed by transforming the current values into constant values. This, however, could cause new problems. In this paper, distortions are somewhat lessened by maintaining the current values, concentrating the analysis in terms of relative shares and comparing the composition of production and trade. The distortions remain, however —especially due to price fluctuations for oil products— and should be kept in mind.

2. Some facts about production and trade in Latin America

Before beginning the analysis of composite variables, it is useful to look at absolute figures in the base data. Regional exports increased considerably (80 percent in current dollar terms) between 1978-1980 and 1988-1990, from almost $40 billion to $72 billion. This was achieved during a period in which GPV

3/ The fact that the percentage for trade is less than others may be due to the pricing problems of Cuban trade with its former allies in the Soviet bloc.

increased by 50 percent, imports increased by only 20 percent (a decline in constant terms) and employment actually fell by 5 percent. Another way to present the shift in orientation is through the trade balance, which went from a regional deficit of $9.5 billion in 1978-1980 to a regional surplus of close to $13.5 billion in 1988-1990. This was due not only to the export performance, but also, obviously, to import restrictions.

The regional picture is strongly influenced by the major economies, but the trend is similar in most countries. In 1978-1980, only Brazil and Chile registered a trade surplus, joined by Argentina, Uruguay and Venezuela in 1988-1990. For Argentina and Venezuela, this is mainly explained by an absolute drop in imports. The trade surplus of Brazil is bigger than the surplus of the region as a whole, indicating that the sum of the remaining countries still has a trade deficit in the sectors under analysis.

As for the (adjusted) GPV, only Brazil and Mexico grew faster than the region's average. This implies that the share of these countries in the region's total GPV increased from 57.6 percent in 1978-1980 to 74.9 percent in 1988-1990, a change that occurred mainly at the expense of the relative weight of Argentina and Venezuela.

Finally, the global data reveal that intraregional trade in ISIC chapter 3 industries accounts for only 15 percent of global trade in these industries. This is due to the low share of intraregional trade as a percentage of total trade in Mexico (7.7 percent) and Brazil (14.1 percent). In most other countries, except for Chile, Jamaica and Venezuela, intraregional trade accounts for a larger share of total trade. In Guatemala, Panama and Uruguay, intraregional trade amounts to around 40 percent of total trade. Intraregional trade also accounts for a high percentage of GPV in Guatemala and Uruguay (above 10 percent), but only 1 percent in Mexico and Brazil.

External dependency (imports as a percentage of apparent national consumption, also referred to as demand, ED = M / (GPV + M - E)) decreases with the size of the economy. Brazil imports only 4.6 percent of consumption, Argentina 14.7 and Mexico 15.9. At the other end, the Central American economies have a 40 percent external dependency, and Barbados imports an exceptional 73.6 percent of consumption. The average for the rest of South America lies between 17.1 percent (Bolivia) and 34.2 percent (Chile).

This quick review of the base data reveals that intraregional trade was sluggish in the 1980s as compared to extraregional trade, and that the opening-up of the economies of the region came about through export growth more than through the growth of imports. The period under investigation can therefore be seen as an atypical period in Latin American history, a period in which the regional integration process was halted. Even so, we will show below that regional trade in this period shows distinct characteristics.

III. RELATIONS AMONG VARIABLES

1. The export performance towards Latin America

Does a strategy of intraregional trade fit into an overall strategy of gaining export strength in world markets and increasing openness to imports from third parties? In a cross-section analysis of the 28 sectors, export-output ratios and import-demand ratios have been calculated for intraregional and extraregional exports.

The hypothesis proposes that for an intraregional export strategy to fit into an overall strategy of export-led growth and openness towards imports, a high intraregional export performance in sector x has to be positively correlated with a high extraregional export performance and a high import-demand ratio in sector x. The sign (positive or negative) of the relationship and the statistical validity of each variable measured with the T-test is examined.

The equation used in the first regression analysis is:

eola89 = c + a(idex89) + b(eoex89) , where

eola89 = X_r/GPV
idex89 = M_e/(GPV+M-X)
eoex89 = X_e/GPV

$_r$ refers to intraregional trade,
$_e$ refers to extraregional trade,

eola stands for the export-output ratio for intraregional exports,
eoex stands for the export-output ratio for extraregional exports,
id stands for the import-demand ratio, and

89 stands for the three-year average 1988-1990.

The correlation between the export performance towards regional markets and openness to extraregional imports is of the right sign (positive) in 12 out of 13 cases and statistically significant in 5 (95 percent confidence level) or 7 (90 percent) out of 13 cases. This means that sectors with a high export-output ratio, taking into account only intraregional exports, overlap with sectors having a high import-demand ratio, taking into account only extraregional imports. The correlation between the export performance towards regional markets and towards extraregional markets is positive in 12 out of 13 cases, and statistically significant in 6 (95 percent) or 7 (90 percent).

Overall, this analysis confirms the hypothesis that an intraregional export strategy is compatible with a global export drive and with openness to third-party imports. This is clearly true for the major economies of the region —Argentina, Brazil, Chile, Ecuador, Mexico and Venezuela— which show statistically significant results at the 90 percent confidence level both on the import-demand variable and on the extraregional export-output ratio. Colombia is an important exception. Significant relationships are also found for Guatemala and Panama. For Barbados, Bolivia, Jamaica and Uruguay, no statistically significant correlation was found on these variables (see table 1).

For the region as a whole, even the overall fit is satisfactory and the correlations are particularly robust.

2. The degree of intra-industry trade

Is intraregional trade of a different nature from extraregional trade? The next section further elaborates on this issue, but first we will analyse the differences between intra- and extraregional trade in the degree of intra-industry trade.4/ The 3-digit ISIC data present a level of aggregation that is not very suitable for this type of analysis; what is more surprising is that statistically significant differences are found between intra- and extraregional trade flows in this respect.

The hypothesis underlying the regression analysis is that intra-industry trade is higher in intraregional trade than in extraregional trade. The equation used is:

$$g = c + a(eola) + b(eoex) + d(idla) + e(idex)$$

The regression is made for the periods 1988-1990 and 1978-1980. For 1988-1990, the correlation between the degree of intra-industry trade and the export-output ratio for exports to the region is positive in 11 out of 13 cases, but only statistically significant in 3 (see table 2). For 1978-1980, the result is closer to the hypothesis: positive in 12 cases, significant in 8 (see table 3). Perhaps the contraction of imports, which strongly affected intraregional imports, accounts for the decrease in the statistical significance of the relationship and for the decline in the intra-industry nature of intraregional trade. The normal situation would be similar to that of 1978-1980 and would prove, though not so conclusively, the initial hypothesis.

The correlation between the degree of intra-industry trade and the export-output ratio for exports to third parties is of the right sign (negative) in 10 out of 13 cases, and it is statistically significant in 3 of those cases. For 1978-1980, 9 cases were negatively correlated, with 4 statistically significant. Interestingly, the correlation is statistically significant, but of the unexpected (positive) sign in two particular cases, Barbados and Panama. This might be explained by a kind of "maquiladora" relationship, in which exports to third countries are only slightly manufactured forms of what was previously imported from the same countries. Exports from free zones are not accounted for in the data, but nevertheless the explanation might hold.

4/ The traditional Grubel and Lloyd measure is used to define the degree g of intra-industry trade. The formula is:

$$g = (((X+M) - (|X-M|))/ (X+M))*100$$

The degree g is 100 for any sector when the value of exports matches exactly the value of imports in that sector, indicating perfect intra-industry trade, and is 0 if there are solely exports or imports in the sector, indicating absolute non-existence of intra-industry trade.

Graph 1 shows that the sector is export-oriented and focused on regional markets in seven countries (Argentina, Bolivia, Brazil, Chile, Mexico, Panama and Uruguay), and domestic market-oriented in four (Colombia, Ecuador, Guatemala and Venezuela). A shift can be observed towards a regional market orientation in the Andean Pact countries from 1978-1980 to 1988-1990. No information is available for Barbados and Jamaica.

2. Food products (ISIC 311-12)

The second important sector in intraregional trade in Latin America is food products. The sector accounts for 12.4 percent of intraregional exports, 18.2 percent of manufactured output and 16.2 percent of regional employment.

Graph 2 clearly shows that the export orientation of the industry is in no case dominated by regional markets. The industry is third-party market export-oriented in the cases of Argentina, Brazil, Colombia, Guatemala and Uruguay. It is a home market-oriented sector with some exports to third-party markets in the cases of Barbados, Chile, Ecuador, Jamaica and Mexico, and it is domestic market-oriented with some regional trade only in the case of Bolivia and Venezuela.

The comparison with the situation in the chemical industry is clear: in food products, most countries are competitive in extraregional markets; in chemical products, they are competitive in regional markets. Both industries have a major share of intraregional exports, but the regional market is decisive only for chemicals.

3. Transport equipment (ISIC 384)

The sector third in importance to intraregional trade includes the manufacture of motor cars, ships, railroad equipment, aeroplanes, bicycles and motorcycles. The transport equipment industry accounts for 10.7 percent of intraregional exports, showing an upward trend. The sector provides 7.1 percent of the region's output and 6 percent of the region's jobs.

This industry is export-oriented in only two countries: Brazil and Mexico. The difference is that Mexico increasingly exports extraregionally, whereas Brazil exports predominantly inside the region.

Comparison with the chemical industry shows an important difference: while two countries dominate trade in transport equipment, the participation of countries in the chemical trade is more diversified. Both industries account for a large share of intraregional exports, but intraregional trade is vital for the sector only in the case of Brazil.

4. Iron and Steel (ISIC 371)

The fourth industry in intraregional exports is the manufacture of primary iron and steel products, from foundry to sheets of semi-finished products. The iron and steel industry has experienced a strong increase in its weight in intraregional trade, from 3.9 percent in 1978-1980 to 9.5 percent in 1988-1990. It is again a relatively capital-intensive industry, like others that dominate intraregional trade, as its share of output (6.6 percent) exceeds by far its share in employment (3.4 percent). It is noteworthy, in this industry as in transport equipment, that despite an increase in its share of intraregional exports, its share in employment has declined.

For Argentina and Colombia, this sector is export-oriented with a predominance of extraregional markets. In the case of Brazil, as iron and steel is also an export-oriented industry, the relative importance of intraregional and extraregional markets is equal. This balance in destination of exports also holds in the case of Mexico, but there the orientation of the sector is mainly towards domestic markets.

This industry shows characteristics more similar to food products than to transport equipment and chemicals, as third-party markets seem to be more decisive than regional markets.

5. Petroleum refineries (ISIC 353)

The industry fifth in importance to intraregional trade (8.2 percent) is refined oil. It was first in importance in 1978-1980 (17.5 percent) due to price fluctuations. The countries where it is a third-party market-oriented industry are the well-known oil producers: Ecuador, Venezuela, Mexico and Colombia. The relative weight of extraregional markets seems to be balanced by the weight of intraregional trade only for Ecuador. In all other countries, it is basically a domestic market-oriented industry, in a few cases some extraregional trade, and in others some intraregional trade. This is clearly again a branch like food products and iron and steel where third-party markets are more vital than intraregional markets.

6. Non-electrical machinery (ISIC 382)

The last sector in this analysis comprises the manufacture of engines and turbines, equipment for agriculture, metal and woodworking, and machinery for other industries and offices, except electrical machinery. The sector accounts for 7.8 percent of intraregional exports, showing an important decline that corresponds with a decline in the industry's relative position in world trade.

In Argentina and Ecuador, the sector is export-oriented and focused on regional markets, although in Ecuador the overall significance of the industry is relatively low. Mexico also has an export-oriented position, and the destination of exports is equally divided between third-party and regional markets. In countries such as Brazil, Guatemala and Uruguay, trade in non-electrical machinery is oriented towards regional markets, but the relative weights of its domestic sales and its exports are almost equal. Non-electrical machinery is a relatively important sector, with a relatively high share of overall output.

Having said this, it is clear that this sector resembles industries such as chemicals and transport equipment more closely than industries such as food, oil and iron and steel. The regional markets are vital for the industry in some countries. It appears similar to the chemical industry because it also offers intraregional market opportunities for the smaller economies of the region. This sector has an openness similar to the chemical sector, as it accounts for 20 percent of overall imports, making it the leading sector in this regard.

7. Summary of sector characteristics

Combined, the six major industries in intraregional trade account for 63.8 percent of exports to regional markets. They can be divided in two groups of three: one group for which regional markets are of vital importance (chemicals, transport equipment, non-electrical machinery), and one group of more primary activities that, having a major share of intraregional exports, are basically oriented towards third-party markets (food products, refined oil and iron and steel).

Table 1

REGRESSION ANALYSIS OF EXPORT PERFORMANCE TO LATIN AMERICA

		c	1	2	r^2	SE	DW	F
Argentina	c	2.01	0.06	0.12	.21	3.29	2.14	4.57
	T	(2.08)	(1.61)	(2.66)				
Barbados	c	-6.12	0.29	0.15	.09	47.6	1.71	2.38
	T	(-0.31)	(1.02)	(1.28)				
Bolivia	c	4.19	0.03	0.01	-.07	11.8	2.23	0.12
	T	(1.37)	(0.22)	(0.49)				
Brazil	c	0.56	0.10	0.03	.35	0.86	1.95	8.34
	T	(2.10)	(3.69)	(1.41)				
Chile	c	0.11	0.13	0.11	.48	5.96	1.51	13.22
	T	(0.07)	(3.03)	(2.99)				
Colombia	c	3.96	0.003	0.07	-.02	6.39	2.02	0.80
	T	(2.41)	(0.04)	(1.21)				
Ecuador	c	-0.75	0.11	0.34	.77	4.56	1.67	46.36
	T	(-0.60)	(2.90)	(9.58)				
Guatemala	c	13.09	0.15	0.05	.03	12.53	2.02	1.46
	T	(2.89)	(1.70)	(0.20)				
Jamaica	c	5.10	0.04	0.22	-.06	13.47	1.89	0.21
	T	(1.26)	(0.64)	(0.01)				
Mexico	c	-0.06	0.03	0.05	.76	0.58	1.19	44.15
	T	(-0.39)	(3.44)	(5.10)				
Panama	c	2.36	-0.004	0.30	.67	3.94	1.63	28.98
	T	(2.88)	(-1.15)	(5.76)				
Uruguay	c	13.54	0.04	-0.03	-0.04	19.21	1.26	0.49
	T	(3.24)	(0.82)	(-0.13)				
Venezuela	c	0.41	0.08	0.06	.36	2.45	1.76	8.60
	T	(0.60)	(2.96)	(3.42)				
Total Region	c	0.58	0.09	0.05	.59	0.90	1.95	20.68
	T	(1.96)	(5.25)	(2.15)				

dependant variable : eoal89
independent variables:
1= idex89
2= eoex89

Table 2

REGRESSION ANALYSIS OF THE DEGREE OF INTRA-INDUSTRY TRADE, 1988-1990

		c	1	2	3	4	r^2	SE	DW	F
Argentina	c	49.02	1.34	-1.29	6.53	-0.57	.30	23.56	2.17	3.88
	T	(6.52)	(0.82)	(-2.93)	(2.71)	(-2.15)				
Barbados	c	60.48	0.10	0.19	-0.02	-0.52	.37	22.34	1.81	5.03
	T	(5.81)	(1.11)	(3.26)	(-0.07)	(-3.89)				
Bolivia	c	24.92	0.10	-0.02	-0.48	-0.16	.05	23.17	1.55	1.35
	T	(3.37)	(0.25)	(-0.30)	(-1.60)	(-0.64)				
Brazil	c	43.30	12.75	-3.04	9.30	0.06	.47	19.86	1.22	6.87
	T	(6.52)	(2.51)	(-4.17)	(4.01)	(0.07)				
Chile	c	39.43	0.88	-0.10	0.71	-0.46	.00	24.56	2.64	1.03
	T	(5.82)	(1.06)	(-0.53)	(1.14)	(-1.98)				
Colombia	c	54.72	-0.60	-0.18	0.28	-0.73	.06	29.55	1.57	1.41
	T	(6.48)	(-0.64)	(-0.53)	(0.61)	(-2.07)				
Ecuador	c	31.43	0.57	-0.40	-0.65	-0.39	.09	22.16	2.03	1.69
	T	(4.90)	(0.58)	(-1.07)	(-0.96)	(-1.58)				
Guatemala	c	37.84	0.91	-0.24	-0.04	-0.03	.32	25.99	2.45	4.15
	T	(4.04)	(2.29)	(-0.52)	(-1.08)	(-2.93)				
Jamaica	c	34.87	0.38	0.05	-1.53	-0.04	.04	27.20	1.20	1.32
	T	(3.73)	(0.93)	(0.90)	(-1.30)	(-0.32)				
Mexico	c	59.54	0.04	-0.59	18.72	-0.32	.00	20.91	2.06	1.02
	T	(10.21)	(0.01)	(-1.21)	(1.60)	(-0.76)				
Panama	c	27.82	-0.89	1.65	-1.24	-0.05	.42	21.99	1.75	5.91
	T	(4.26)	(-0.78)	(3.77)	(-1.70)	(-2.34)				
Uruguay	c	46.77	0.19	-0.40	-0.24	0.17	.02	29.39	1.41	1.13
	T	(5.84)	(0.57)	(-1.11)	(-0.78)	(0.66)				
Venezuela	c	51.59	4.39	-0.59	1.04	-1.04	.39	19.42	1.21	5.31
	T	(8.72)	(2.68)	(-3.31)	(0.60)	(-4.16)				

dependant variable: g
independent variables:
1= eola 2= eoex
3= idla 4= idex

The least convincing of the four variables examined in correlation with the degree of intra-industry trade is the import-demand ratio for imports from the region. The correlation with the import-demand ratio for third-party imports is much clearer. The correlation is of the right sign (negative) in 11 cases in 1988-1990, and in all cases in 1978-1980. It is significant in 7 (1988-1990) and 9 (1978-1980) cases.

This evidence, more because of the signs than because of the overall fit of the regression, strongly suggests that intraregional trade is different from extraregional trade. Again, this holds for the major economies of the region, with the important exception of Mexico in 1988-1990 (no difference of this kind can be found statistically for this case). A singular exception is also the already noted unexpected sign for Barbados and Panama.

The three sectors in the first group also share a surprising characteristic that should not go without comment —they are precisely the industries that account for the biggest share of direct United States and Japanese foreign investment.5/ The issue of the impact of foreign transnationals on intra-Latin American trade would require another study, but this indicates the importance of these enterprises.

An analysis of the position of each sector in each country clearly indicates a predominance of domestic market-oriented industries with a trade orientation towards regional markets. Table 5 summarizes this, for a total of 13 x 28 = 364 possible observations, with 20 missing observations for each period.

Table 5

GLOBAL RESULTS OF COMPETITIVE POSITIONS

Inward-looking, regional markets: 1979: 219 cases 1989: 190 cases	Outward-looking, regional markets: 1979: 45 cases 1989: 39 cases
Inward-looking, extraregional markets: 1979: 53 cases 1989: 67 cases	Outward-looking, extraregional markets: 1979: 27 cases 1989: 48 cases
Total inward-looking: 1979: 272 cases 1989: 257 cases	Total outward-looking: 1979: 72 cases 1989: 87 cases
Total regional market-oriented: 1979: 264 cases 1989: 229 cases	Extraregional market-oriented: 1979: 80 cases 1989: 115 cases

The main shift is clearly from regional-market focused sectors towards extraregional market-oriented sectors (a net shift of 35 sectors out of 344), which, as we assumed in the introduction, might change. There was also a shift away from domestic demand to external demand, which was already clear from the basic facts presented above. Our hypothesis is that this reflects a structural change in development strategy. The most noticeable feature of table 5, however, is the large number of sectors in which production is still basically domestic demand-oriented. This may not change very much, as it is a common feature of economies worldwide. It is striking, however, that what trade exists in these sectors is basically oriented towards regional markets. As economic recovery in these markets gathers speed, there appears to be ample room to increase intraregional trade.

5/ Interamerican Development Bank (IDB), Economic and Social Progress in Latin America, Report 1992, Washington D.C., 1992, page 232.

Tables 6 and 7 present detailed information on sectors and countries in the two situations that are most relevant to our discussion: outward-looking sectors, both regional market-oriented (table 6) and extraregional market-oriented (table 7).

Table 6

REGIONAL INTEGRATION INDUSTRIES

321: Textiles	Bolivia
322: Clothing	Colombia, Ecuador
324: Footwear	Colombia, Guatemala
331: Wood and wood products	Bolivia
341: Paper	Barbados, Chile
342: Printing and publishing	Colombia
351: Chemical industries	Argentina, Barbados, Bolivia, Brazil, Chile, Mexico, Panama, Uruguay
352: Other chemical industries	Barbados, Jamaica, Panama
354: Oil derivatives	Guatemala
355: Rubber	Panama
361: Ceramics	Guatemala, Brazil
371: Iron and Steel	Brazil
382: Non-electrical machinery	Argentina, Ecuador
383: Electrical machinery	Mexico
384: Transport equipment	Brazil
385: Scientific instruments	Brazil, Chile, Guatemala, Mexico, Uruguay
390: Other manufactures	Barbados, Chile, Guatemala, Panama, Uruguay

The comparison of tables 6 and 7 underlines a central argument of this paper: while extraregional trade appears to be dominated by semi-manufactures and mature technologies, such as foodstuffs, clothing and shoes, intraregional trade appears to offer opportunities for a more diversified and technologically demanding group of industries such as chemicals and the sectors in ISIC chapter 38. An important exception could be the relatively diversified and technologically sophisticated nature of Mexico's extraregional trade.

Table 3

REGRESSION ANALYSIS OF THE DEGREE OF INTRA-INDUSTRY TRADE, 1978-1980

		c	1	2	3	4	r^2	SE	DW	F
Argentina	c	44.10	8.86	-1.72	-0.96	-1.14	.25	20	1.41	3.24
	T	(6.61)	(2.75)	(-2.16)	(-0.53)	(-2.82)				
Barbados	c	52.68	-0.07	0.27	-0.30	-0.34	.22	27.29	1.62	2.94
	T	(3.39)	(-0.70)	(3.32)	(-0.68)	(-2.05)				
Bolivia	c	29.09	0.25	-0.04	-1.27	-0.12	.14	23.65	1.57	2.06
	T	(3.80)	(0.50)	(-0.40)	(-1.49)	(-0.47)				
Brazil	c	43.80	12.38	-1.64	-1.27	-1.41	.24	25.55	1.88	3.17
	T	(4.82)	(2.65)	(-2.04)	(-0.53)	(-1.90)				
Chile	c	30.63	0.83	-0.31	0.91	-0.36	-.03	25.95	1.67	0.80
	T	(3.67)	(1.22)	(-0.99)	(0.49)	(-1.33)				
Colombia	c	37.17	3.40	-0.07	-0.12	-0.86	.21	25.93	1.54	2.80
	T	(4.03)	(2.50)	(-0.11)	(-0.14)	(-2.54)				
Ecuador	c	18.11	0.09	-0.07	-0.23	-0.24	.01	15.98	2.12	1.10
	T	(3.83)	(0.60)	(-0.95)	(-1.30)	(-1.63)				
Guatemala	c	25.40	1.04	0.01	1.37	-0.67	.61	18.01	2.45	11.71
	T	(3.24)	(3.80)	(0.45)	(2.71)	(-4.22)				
Jamaica	c	38.20	1.15	-0.08	-0.54	-0.36	.15	23.38	1.92	2.17
	T	(5.09)	(2.60)	(-1.57)	(-0.59)	(-2.06)				
Mexico	c	59.10	8.42	1.15	-2.34	-1.54	.52	18.01	2.20	8.21
	T	(12.40)	(2.17)	(1.54)	(-0.64)	(-4.23)				
Panama	c	28.98	0.35	3.84	-0.57	-0.38	.60	17.49	1.86	11.04
	T	(4.62)	(0.67)	(3.70)	(-1.45)	(-3.22)				
Uruguay	c	44.97	1.36	-0.98	-0.76	-0.61	.38	18.73	2.06	5.18
	T	(7.20)	(2.18)	(-2.31)	(-2.70)	(-2.32)				
Venezuela	c	9.47	5.69	-0.67	-0.09	-0.14	.53	13.83	1.87	8.69
	T	(1.96)	(5.18)	(-3.39)	(-0.09)	(-0.96)				

dependant variable: g
independent variables:
1 = eola
2 = eoex
3 = idla
4 = idex

IV. THE CHARACTERISTICS PER SECTOR

To present and analyse the data by sector, a two-by-two graph has been constructed, with the orientation of production (orprod) on the X-axis and the orientation of trade (orcom) on the Y-axis. The formulas used are:

$$orprod = ((X_{ij}/X_j) / (GPV_{ij}/GPV_j)) * 100 - 100 \text{ and}$$
$$orcom = (({}^{i}X_{ij}/{}^{i}X_j) / ({}^{e}X_{ij}/{}^{e}X_j)) * 100 - 100$$

The ^{i} refers to intraregional exports,
the ^{e} refers to extraregional exports,
the $_{i}$ refers to sector i, and
the $_{j}$ refers to country j.

If the orientation of production is negative in this formula, the sector weighs more in the production structure than it does in the export structure, and we may call it domestic market-oriented. Likewise, if the value is positive, we may call it export-oriented.

If the orientation of trade, the second formula, is negative, the sector weighs more in extraregional exports than it does in intraregional exports, and we may call it extraregionally oriented. Likewise, if the value is positive, we may call it regional market-oriented (see table 4).

Table 4

TYPOLOGY OF COMPETITIVE POSITIONS

		ORIENTATION OF PRODUCTION	
ORIENTATION OF TRADE		Domestic	Foreign Market
	Regional markets	Inward-looking, regional markets	Outward-looking, regional markets
	Extraregional markets	Inward-looking, extraregional markets	Outward-looking, extraregional markets

As can be observed in table 6 (appendix), the six sectors with the biggest share in intraregional exports are chemical industries, food products, transport equipment, refined oil, iron and steel, and non-electrical machinery. We will comment upon the specific situation in each of these sectors.

1. Chemical industries (ISIC 351)

This sector includes basic industrial chemicals, fertilizers and pesticides, artificial fibres and plastics. It is a heterogeneous sector, frequently related to the presence of natural resources and economies of scale. It accounts for 15.2 percent of intraregional exports in 1988-1990 (compared to 7.0 percent in 1978-1980), but only 6.8 percent of output, and 2.9 percent of employment. The sector is also characterized by a high degree of openness (it accounts for 17.1 percent of overall imports), and a high degree of intra-industry trade. This industry can be see as a typical intraregional trade sector.

Table 7

INDUSTRIES THAT ARE EXTRAREGIONALLY COMPETITIVE

311-12: Food products	Argentina, Brazil, Colombia, Guatemala, Uruguay
321: Textiles	Barbados, Jamaica, Panama, Uruguay
322: Clothing	Guatemala, Jamaica, Panama, Uruguay
323: Leather	Argentina, Bolivia, Brazil, Colombia, Panama, Uruguay
324: Footwear	Brazil, Uruguay
331: Wood and wood products	Brazil, Chile, Ecuador, Guatemala, Panama
341: Paper	Brazil
351: Chemical industries	Jamaica
353: Refined oil	Barbados, Colombia, Ecuador, Mexico, Venezuela
361: Ceramics	Chile,
371: Iron and Steel	Argentina, Colombia
372: Non-ferrous metals	Argentina, Bolivia, Brazil, Chile, Panama, Mexico, Venezuela
382: Non-electrical machinery	Mexico
384: Transport equipment	Mexico
390: Other manufactures	Bolivia, Colombia

V. CONCLUSIONS

Severe import restrictions have caused Latin American production to shift in an outward-looking direction. Intraregional trade accounts for only a small proportion of total trade and was not very dynamic in the 1980s, but seems to offer ample room for increased trade in those sectors that may face difficulties when competing in wider world markets. Indeed, the information for the early 1990s confirms that regional trade is becoming very dynamic for several countries.

The regression analyses bear out the conclusion that, generally speaking and most clearly for the major economies, the export performance towards markets of the region is not incompatible with openness to imports from outside the region or with a growing export performance towards extraregional

markets. Intraregional trade should therefore not be seen as a substitute for extraregional trade, but more as a complement to it. This would allow for diversification of the production apparatus and a technological learning process, aspects that do not appear to be present to the same extent in extraregional trade. This thesis derives mainly from the fact that intraregional trade is more intra-industry in nature than extraregional trade. Also, the sector analysis has revealed that industries for which intraregional trade is vital (chemicals, transport equipment and non-electrical machinery, among the principal ones, with scientific instruments among the more marginal ones) are technologically more demanding than those for which third-country markets are vital (food products, refined oil, iron and steel).

In some industries, a clear specialization pattern seems logical, as in the transport equipment sector where Brazil and Mexico are bound to dominate trade. These economies can be expected to hold a dominant position in most industries. Nevertheless, intraregional trade in industries such as chemicals and non-electrical machinery seems to offer opportunities to most smaller economies as well. There is perhaps a curious contradiction here: regional markets are relatively less attractive to those countries (Brazil and Mexico) likely to enjoy the most advantages in them. For countries that might have more difficulty in the face of competition (Guatemala and Uruguay), regional markets account for a significant portion of exports. In some cases (Bolivia), even regional markets are likely to require a specialization in technologically mature industries and primary activities.

To summarize, most sectors in the first period, 1978-1980, were domestic demand-oriented, with trade focusing on regional markets. Extraregional trade was dominated by only two to four industries (foodstuffs, leather, refined oil and non-ferrous metals). Only the textile and clothing sectors exhibited the exceptional situation of being domestic demand-oriented, with trade focusing on extraregional markets. Almost no industries were outward-oriented, focusing on regional markets.

The shift of the 1980s is clear: the sectors became more outward-oriented, and trade focused more on extraregional markets. New sectors that define extraregional trade are wood products, footwear, and to some extent iron and steel, paper and ceramics. The exceptional characteristics of the textiles and clothing markets still hold, with a less competitive position for textiles and a more competitive position for clothing. Furniture and plastics now fall in this category as well.

Of special relevance to this discussion about prospects for intraregional trade is the first quadrant: outward-oriented sectors focusing on regional markets. Technology-intensive industries such as chemicals, transport equipment, non-electrical machinery and scientific instruments now fall in this category, from which they were previously virtually absent. For this reason, intraregional trade can be expected to play a significant role in the technological upgrading and diversification of the Latin American production sector.

STATISTICAL APPENDIX

Table 1

EXPORTS AND IMPORTS FROM ISIC 3 AS A PERCENTAGE OF TOTAL EXPORTS OF GOODS
(Millions of US dollars)

	1978-1980						1988-1990					
COUNTRY	EXPORTS			IMPORTS			EXPORTS			IMPORTS		
	ISIC 3	Total	%	ISIC 3	Total	%	ISIC 3	Total	%	ISIC 3	Total	%
ARGENTINA	4467	7411	60.3	5752	7027	81.9	7668	10349	74.1	3790	4527	83.7
BARBADOS	120	127	94.7	364	378	96.4	192	148	129.3	585	676	86.5
BOLIVIA	385	873	44.1	680	862	78.9	287	781	36.8	556	638	87.2
BRAZIL	11635	16012	72.7	10669	18241	58.5	27129	33187	81.7	11680	17822	65.5
CHILE							5489	7814	70.2	5056	6756	74.8
COLOMBIA	2159	3371	64.0	3069	4485	68.4	3439	6159	55.8	4698	4717	99.6
ECUADOR	1150	2058	55.9	1742	2161	80.6	872	2423	36.0	1654	1811	91.3
GUATEMALA	726	1278	56.8	1064	1498	71.0	724	1137	63.7	1427	1616	88.3
JAMAICA	606	849	71.4	769	1171	65.7	649	1013	64.1	769	1737	44.3
MEXICO	5410	10621	50.9	11419	13549	84.3	16436	23368	70.3	19578	24036	81.5
PANAMA	102	336	30.3	687	1099	62.5	108	2712	4.0	704	3176	22.2
URUGUAY	720	844	85.3	795	1214	65.5	1345	1565	85.9	1035	1241	83.4
VENEZUELA	9386	14270	65.8	9586	10852	88.3	8041	13626	59.0	7544	8148	92.6
TOTAL	36866	58049	63.5	46596	62535	74.5	72379	104282	69.4	59076	76901	76.8

Source: For total exports of goods, see ECLAC, "Economic Survey" various years.

Table 2

BASIC DATA PER COUNTRY														
	GROSS PRODUCTION VALUE (millions of current US$)				EXPORTS (millions of current US$)				IMPORTS (millions of current US$)				LABOUR x 1,000 workers	
	NOT ADJUSTED		ADJUSTED		WORLD TOTAL		TOTAL TO REGION		WORLD TOTAL		TOTAL FROM REGION			
COUNTRY	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
ARGENTINA	113364	43452	78153	49549	4467	7668	1299	2004	5752	3790	1062	1030	1439	1038
BARBADOS	195	401	201	402	120	192	23	32	364	585	87	126	8	8
BOLIVIA	1940	1848	1955	1874	385	287	88	90	680	556	192	259	96	149
BRAZIL	158761	289506	131301	268474	11635	27129	2434	3817	10669	11680	1365	2004	4261	4198
CHILE	10791	15438	10592	15237	3001	5489	773	756	2727	5056	592	1223	215	223
COLOMBIA	13957	20138	15629	20521	2159	3439	470	763	3069	4698	497	985	503	478
COSTA RICA	2317	3015	1758	2915	550	ND	248	ND	1071	1746	282	452	ND	120
CUBA	6948	10648	6948	10648	4370	ND	0	ND	ND	ND	ND	ND	505	689
DOMINICAN REPUBLIC	2150	ND	1918	ND	482	ND	71	ND	769	ND	63	ND	134	ND
ECUADOR	3039	3773	3437	4061	1150	872	303	223	1742	1654	226	371	105	110
EL SALVADOR	1100	ND	1153	ND	519	341	259	158	716	852	260	226	46	ND
GUATEMALA	1832	2189	2050	2250	726	724	297	342	1064	1427	232	311	80	92
GUYANA	ND	ND	ND	ND	167	ND	46	ND	255	ND	81	ND	31	ND
HAITI	ND	ND	ND	ND	70	ND	2	ND	139	ND	8	ND	23	28
HONDURAS	ND	2294	ND	1806	335	526	79	56	640	730	145	184	51	68
JAMAICA	1544	2136	1584	2047	606	649	74	47	769	1283	129	200	45	59
MEXICO	79829	128463	71665	119781	5410	16436	612	1269	11419	19578	617	784	2280	2287
NICARAGUA	938	ND	1082	ND	367	ND	119	ND	474	ND	203	ND	31	ND
PANAMA	1249	1504	1278	1516	102	108	38	47	687	704	92	112	30	34
PARAGUAY	ND	ND	ND	ND	113	240	63	144	416	801	192	327	ND	ND
PERU	10279	ND	9207	ND	1923	1770	468	290	1566	1910	219	523	269	ND
SURINAME	144	309	137	ND	1	ND	0	ND	24	ND	1	ND	7	6
TRINIDAD AND TOBAGO	1253	ND	1402	ND	2301	1383	367	265	1437	922	124	116	44	30
URUGUAY	5098	4464	4631	4321	720	1345	267	508	795	1035	340	518	221	125

Conclusion table 2

BASIC DATA PER COUNTRY														
	GROSS PRODUCTION VALUE (millions of current US$)				EXPORTS (millions of current US$)				IMPORTS (millions of current US$)				LABOUR x 1,000 workers	
	NOT ADJUSTED		ADJUSTED		WORLD TOTAL		TOTAL TO REGION		WORLD TOTAL		TOTAL FROM REGION			
COUNTRY	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
VENEZUELA	25063	27001	29861	28284	9386	8041	1097	920	9586	7544	964	862	461	482
TOTAL 25 COUNTRIES	441790	556580	375940	533687	51064	76640	9496	11727	56831	66551	7973	10615	10887	10225
TOTAL 13 COUNTRIES	416662	540313	352336	518318	39868	72381	7775	10815	49325	59590	6394	8787	9745	9285
13 AS % OF TOTAL 25	94	97	94	97	78	94	82	92	87	90	80	83	90	91

Table 3

PERCENTAGES PER COUNTRY																		
	GROSS PRODUCTION VALUE				EXPORTS				IMPORTS				LABOUR		INTRAREGIONAL TRADE INTENSITY (INTRA/TOTAL) *100%			
	NOT ADJUSTED		ADJUSTED		WORLD TOTAL		TOTAL REGION		WORLD TOTAL		TOTAL REGION				EXPORTS		IMPORTS	
COUNTRY	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
ARGENTINA	27.2	8.0	22.2	9.6	11.3	10.6	16.7	18.5	15.5	12.5	17.4	13.3	14.8	11.2	28.9	26.1	14.1	14.5
BARBADOS	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.7	1.0	1.3	1.6	0.1	0.1	19.5	16.4	23.9	21.5
BOLIVIA	0.5	0.3	0.6	0.4	1.0	0.4	1.1	0.8	1.3	0.6	3.0	2.1	1.0	1.6	22.9	31.2	28.2	46.5
BRAZIL	38.1	53.6	37.3	51.8	29.2	37.5	31.3	35.3	20.7	13.2	21.1	16.6	43.7	45.2	20.9	14.1	12.8	17.2
CHILE	2.6	2.9	3.0	2.9	7.5	7.6	9.9	7.0	5.3	8.6	9.2	15.2	2.2	2.4	25.7	13.8	21.7	24.2
COLOMBIA	3.3	3.7	4.4	4.0	5.4	4.7	6.0	7.1	6.0	7.9	7.7	12.2	5.2	5.2	21.7	22.2	16.2	21.0
ECUADOR	0.7	0.7	1.0	0.8	2.9	1.2	3.9	2.1	3.4	2.8	3.5	4.6	1.1	1.2	26.4	25.5	13.0	22.4
GUATEMALA	0.4	0.4	0.6	0.4	1.8	1.0	3.8	3.2	2.1	2.4	3.6	3.9	0.8	1.0	40.9	47.2	21.9	21.8
JAMAICA	0.4	0.4	0.4	0.4	1.5	0.9	1.0	0.4	1.5	2.2	2.0	2.5	0.5	0.6	12.3	7.3	16.8	15.6
MEXICO	19.2	23.8	20.3	23.1	13.6	22.7	7.9	11.7	22.1	33.1	9.6	9.7	23.4	24.6	11.3	7.7	5.4	4.0
PANAMA	0.3	0.3	0.4	0.3	0.3	0.1	0.5	0.4	1.3	1.2	1.4	1.4	0.3	0.4	37.5	43.1	13.3	15.9
URUGUAY	1.2	0.8	1.3	0.8	1.8	1.9	3.4	4.7	1.5	1.8	5.3	6.4	2.3	1.3	37.0	37.7	42.7	50.0
VENEZUELA	6.0	5.0	8.5	5.5	23.5	11.1	14.1	8.5	18.6	12.8	14.9	10.7	4.7	5.2	11.7	11.4	10.1	11.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	19.5	14.9	12.5	13.7

Table 4

INDICATORS PER COUNTRY														
	1. EXPORT PERFORMANCE (X/GPV adjusted)*100%				2. PRODUCTIVITY (VA adj./LABOR)		3.TRADE ORIENTATION Xintra/XTot*100%		4. EXTERNAL DEPENDENCY (M/ Demand)*100%				5. PROFITABILITY (VA-SAL/VA)*100%	
	WORLD		REGION						WORLD		REGION			
COUNTRY	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
ARGENTINA	5.7	15.5	1.7	4.0	22568	26783	28.93	26.06	9.79	14.70	1.38	2.13	32.53	45.67
BARBADOS	59.7	47.8	11.7	7.9	6114	12904	19.52	16.42	81.80	73.58	19.55	15.85	10.76	9.12
BOLIVIA	19.7	15.3	4.5	4.8	7212	5833	22.86	31.15	30.24	17.05	8.52	7.93	23.91	34.01
BRAZIL	8.9	10.1	1.9	1.4	12571	28470	20.92	14.07	8.19	4.64	1.05	0.80	33.01	35.45
CHILE	28.3	36.0	7.3	5.0	22705	27473	25.75	13.76	26.43	34.15	5.73	8.26	37.62	33.52
COLOMBIA	13.8	16.8	3.0	3.7	13371	16545	21.75	22.19	18.56	21.57	3.01	4.52	34.54	34.80
ECUADOR	33.4	21.5	8.8	5.5	13243	10206	26.36	25.51	42.96	33.64	7.49	7.54	28.45	18.18
GUATEMALA	35.4	32.2	14.5	15.2	10255	10227	40.86	47.16	44.56	48.33	9.74	10.54	31.79	33.71
JAMAICA	38.2	63.4	4.7	4.6	9555	9793	12.29	7.25	44.01	47.86	7.39	7.47	14.56	14.52
MEXICO	7.5	13.7	0.9	1.1	12863	23098	11.31	7.72	14.70	15.93	0.79	0.64	27.11	35.36
PANAMA	8.0	7.1	3.0	3.1	13189	15408	37.54	43.15	36.89	34.86	4.92	5.55	22.07	21.79
URUGUAY	15.6	31.1	5.8	11.8	8279	15277	37.03	37.75	16.90	25.81	7.22	12.91	25.38	32.83
VENEZUELA	31.4	28.4	3.7	3.3	30717	24781	11.68	11.44	31.89	26.61	3.21	3.04	34.07	31.74

Note:

All data are in current dollars, and refer to three-year averages, except for:

Argentina: GPV, productivity, profitability and demand, column 88-90 refers to the average of 1988 and 1989.

Barbados: GPV, productivity, profitability and demand in column 88-90 refers to 1988. Exports and imports in column 88-90 refers to the average of 1989 and 1990.

Bolivia: GPV, productivity, profitability and demand in column 88-90 refers to the average of 1988-1989.

Brazil: GPV, productivity, profitability and demand in column 88-90 refers to the average of 1988 and 1989.

Chile: For 1990 GPV, VA, employment and wages were estimated, for items 356 and 385, on the basis of the values for 1989.

Ecuador: GPV, productivity, profitability and demand in column 88-90 refers to the average of 1988-1989.
Imports in column 78-80 refers to the average of 1978 and 1980.

Guatemala: GPV, productivity, and profitability in column 88-90 refers to the average of 1988 and 1989.
Exports and imports in column 88-90 refers to 1990. Demand for 88-90 was calculated as M(1990) over GPV(88-89) plus M(1990) minus X(1990).

Jamaica: GPV 88-90 refers to 1988. Productivity and profitability for 88-90 was calculated with VA estimated for 1988, on the basis of GPV 1988 and the hypothesis of a constant relation GPV/VA. Exports and imports for 88-90 refer to 1988.

Panama: Exports and imports for column 88-90 refer to the average of 1988 and 1989.

Uruguay: GPV, VA, employment and wages for 1990 in items 331,332 and 382 are estimates on the basis of the respective values in 1989.

Venezuela: GPV, productivity, profitability and demand in column 88-90 refer to the average of 1988 and 1989.

Table 5

BASIC DATA PER SECTOR													
		EXPORTS				PRODUCTION		EMPLOYMENT		IMPORTS			
		(millions of current US$)				(adjusted GPV)		(no. of workers)		(millions of current US$)			
		WORLD		REGION		(*1m.US$)				WORLD		REGION	
ISIC	SECTOR	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
300	MANUFACTURING INDUSTRIES	39868	72381	7775	10815	352336	518038	9744950	9285781	49325	59590	6394	8787
311	FOOD PRODUCTS	10965	13730	1008	1346	69657	94306	1557661	1501375	2894	3984	1144	1072
313	BEVERAGES	185	471	85	94	12056	14830	298041	278692	436	455	70	74
314	TOBACCO	21	90	8	10	3883	4775	58251	41072	34	5	3	2
321	TEXTILES	1227	2138	264	379	24155	30900	888116	791202	878	1303	165	285
322	WEARING APPAREL	551	1092	161	260	10697	11083	549621	461752	427	562	127	117
323	LEATHER PRODUCTS	653	1074	51	102	3405	3752	132924	117237	88	343	43	185
324	FOOTWEAR	365	1228	24	50	4319	7150	305875	384964	62	128	14	25
331	WOOD PRODUCTS	503	894	143	67	6135	6066	370117	342740	327	307	200	83
332	FURNITURE	38	105	16	11	4130	4791	245321	238327	36	143	7	8
341	PAPER	630	2186	264	445	9703	16010	228436	221788	1221	1988	224	336
342	PRINTING AND PUBLISHING	186	265	124	121	7072	8846	304527	273960	454	448	77	70
351	CHEMICAL INDUSTRIES	1618	5513	541	1648	14907	35316	199042	269354	7065	10202	627	1526
352	OTHER CHEMICALS	469	889	267	412	15763	27970	353198	336188	1593	2273	293	400
353	PETROLEUM REFINERIES	12694	12072	1357	888	29966	45386	77989	75853	1442	1512	416	597
354	PETROLEUM AND COAL PRODUCTS	73	64	28	20	3039	4856	23830	22189	207	280	11	18
355	RUBBER PRODUCTS	140	509	79	163	5000	8817	129954	119784	453	619	51	98
356	PLASTIC PRODUCTS	136	448	42	65	6691	10651	239300	250053	256	519	32	46
361	POTTERY, CHINA AND EARTHENWARE	50	169	22	25	1357	1500	81703	64534	125	114	21	22
362	GLASS	151	376	116	97	2569	4239	101209	85907	326	304	92	86
369	OTHER NON-METALLIC MINERALS	201	548	108	106	10181	12928	474442	473791	435	386	118	50
371	IRON AND STEEL	1115	6250	305	1032	20176	34067	349154	316282	3565	2999	286	757
372	NON-FERROUS METALS	3102	7297	505	566	6954	13962	99251	104422	1492	1483	641	643
381	METAL PRODUCTS	445	1074	263	307	15326	20312	661662	580660	1464	1742	136	186

Conclusion table 5

BASIC DATA PER SECTOR													
		EXPORTS				PRODUCTION		EMPLOYMENT		IMPORTS			
		(millions of current US$)				(adjusted GPV)		(no. of workers)		(millions of current US$)			
		WORLD		REGION		(*1m.US$)				WORLD		REGION	
ISIC	SECTOR	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
382	NON-ELECTRICAL MACHINERY	1388	3586	830	843	18701	27389	724170	739866	10455	12156	654	757
383	ELECTRICAL MACHINERY	610	1824	307	428	14094	24052	479177	434449	4477	6884	330	434
384	TRANSPORT EQUIPMENT	1967	7525	732	1153	27843	36960	615738	559879	7241	5963	485	790
385	PROFESSIONAL AND SCIENTIFIC EQUIPMENT	147	430	74	105	1441	2746	57751	55189	1485	1963	95	83
390	OTHER MANUFACTURES	236	536	51	75	3114	4578	138303	138927	387	524	33	37

Table 6

PERCENTAGE PER SECTOR (in percentages)												
		EXPORTS				PRODUCTION		EMPLOYMENT		IMPORTS			
		WORLD		REGION						WORLD		REGION	
ISIC	SECTOR	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
300	MANUFACTURING INDUSTRIES												
311	FOOD PRODUCTS	27.5	19.0	13.0	12.4	19.8	18.2	16.0	16.2	5.9	6.7	17.9	12.2
313	BEVERAGES	0.5	0.7	1.1	0.9	3.4	2.9	3.1	3.0	0.9	0.8	1.1	0.8
314	TOBACCO	0.1	0.1	0.1	0.1	1.1	0.9	0.6	0.4	0.1	0.0	0.0	0.0
321	TEXTILES	3.1	3.0	3.4	3.5	6.9	6.0	9.1	8.5	1.8	2.2	2.6	3.2
322	WEARING APPAREL	1.4	1.5	2.1	2.4	3.0	2.1	5.6	5.0	0.9	0.9	2.0	1.3
323	LEATHER PRODUCTS	1.6	1.5	0.7	0.9	1.0	0.7	1.4	1.3	0.2	0.6	0.7	2.1
324	FOOTWARE	0.9	1.7	0.3	0.5	1.2	1.4	3.1	4.1	0.1	0.2	0.2	0.3
331	WOOD PRODUCTS	1.3	1.2	1.8	0.6	1.7	1.2	3.8	3.7	0.7	0.5	3.1	0.9
332	FURNITURE	0.1	0.1	0.2	0.1	1.2	0.9	2.5	2.6	0.1	0.2	0.1	0.1
341	PAPER	1.6	3.0	3.4	4.1	2.8	3.1	2.3	2.4	2.5	3.3	3.5	3.8
342	PRINTING AND PUBLISHING	0.5	0.4	1.6	1.1	2.0	1.7	3.1	3.0	0.9	0.8	1.2	0.8
351	CHEMICAL INDUSTRIES	4.1	7.6	7.0	15.2	4.2	6.8	2.0	2.9	14.3	17.1	9.8	17.4
352	OTHER CHEMICALS	1.2	1.2	3.4	3.8	4.5	5.4	3.6	3.6	3.2	3.8	4.6	4.5
353	PETROLEUM REFINERIES	31.8	16.7	17.5	8.2	8.5	8.8	0.8	0.8	2.9	2.5	6.5	6.8
354	PETROLEUM AND COAL PRODUCTS	0.2	0.1	0.4	0.2	0.9	0.9	0.2	0.2	0.4	0.5	0.2	0.2
355	RUBBER PRODUCTS	0.4	0.7	1.0	1.5	1.4	1.7	1.3	1.3	0.9	1.0	0.8	1.1
356	PLASTIC PRODUCTS	0.3	0.6	0.5	0.6	1.9	2.1	2.5	2.7	0.5	0.9	0.5	0.5
361	POTTERY, CHINA AND EARTHENWARE	0.1	0.2	0.3	0.2	0.4	0.3	0.8	0.7	0.3	0.2	0.3	0.3
362	GLASS	0.4	0.5	1.5	0.9	0.7	0.8	1.0	0.9	0.7	0.5	1.4	1.0
369	OTHER NON-METALLIC MINERALS	0.5	0.8	1.4	1.0	2.9	2.5	4.9	5.1	0.9	0.6	1.8	0.6
371	IRON AND STEEL	2.8	8.6	3.9	9.5	5.7	6.6	3.6	3.4	7.2	5.0	4.5	8.6
372	NON-FERROUS METALS	7.8	10.1	6.5	5.2	2.0	2.7	1.0	1.1	3.0	2.5	10.0	7.3
381	METAL PRODUCTS	1.1	1.5	3.4	2.8	4.3	3.9	6.8	6.3	3.0	2.9	2.1	2.1

Conclusion table 6

PERCENTAGE PER SECTOR (in percentages)													
		EXPORTS				PRODUCTION		EMPLOYMENT		IMPORTS			
		WORLD		REGION						WORLD		REGION	
ISIC	SECTOR	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
382	NON-ELECTRICAL MACHINERY	3.5	5.0	10.7	7.8	5.3	5.3	7.4	8.0	21.2	20.4	10.2	8.6
383	ELECTRICAL MACHINERY	1.5	2.5	4.0	4.0	4.0	4.6	4.9	4.7	9.1	11.6	5.2	4.9
384	TRANSPORT EQUIPMENT	4.9	10.4	9.4	10.7	7.9	7.1	6.3	6.0	14.7	10.0	7.6	9.0
385	SCIENTIFIC EQUIPMENT ETC.	0.4	0.6	1.0	1.0	0.4	0.5	0.6	0.6	3.0	3.3	1.5	0.9
390	OTHER MANUFACTURES	0.6	0.7	0.7	0.7	0.9	0.9	1.4	1.5	0.8	0.9	0.5	0.4

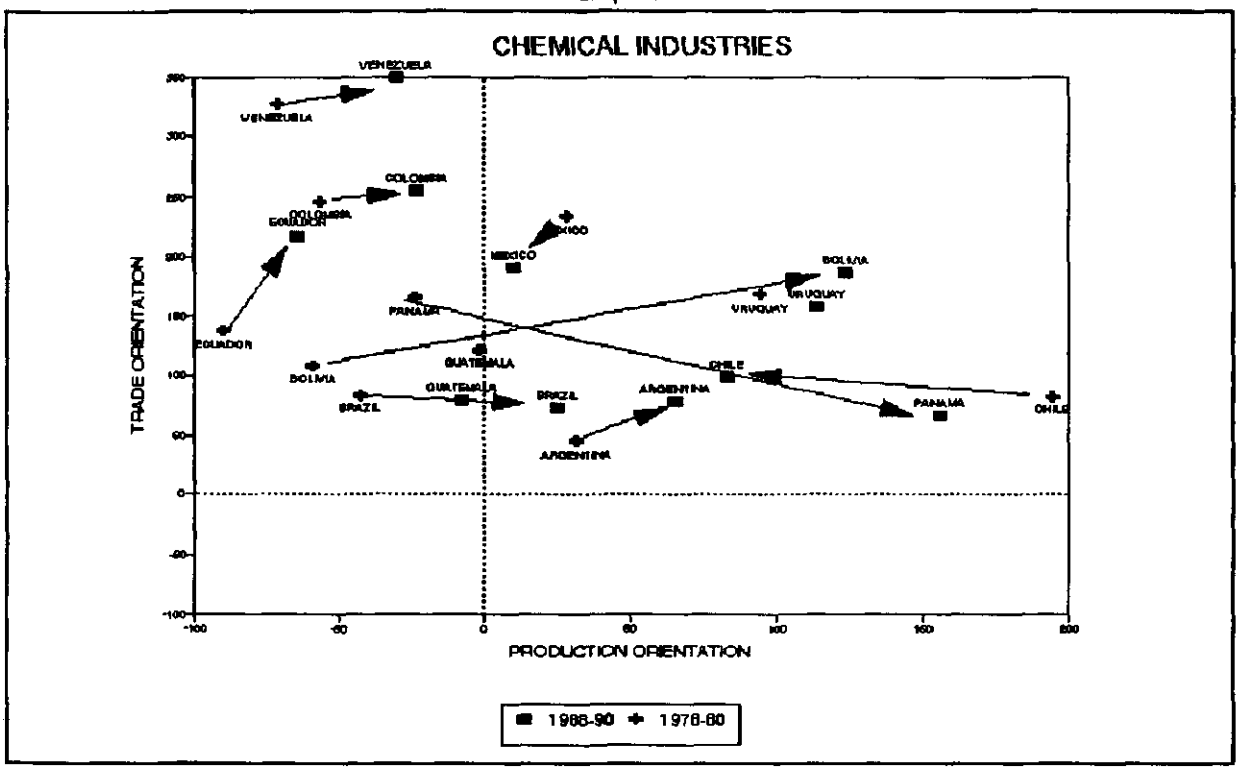
Table 7

BASIC INDICATOR PER COUNTRY													
		EXPORT PERFORMANCE (X/GPV adj.)				TRADE ORIENTATION (1)		EXTERNAL DEPENDENCY (M/ Demand)				PRODUCTION ORIENTATION (2)	
		WORLD		REGION				WORLD		REGION		WORLD	
	SECTOR	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
311	FOOD PRODUCTS	15.9	14.3	1.4	1.2	-57.2	-55.8	4.6	4.2	1.8	1.2	84.0	12.7
313	BEVERAGES	1.4	2.5	0.7	0.5	75.2	66.0	3.8	3.3	0.9	0.7	-83.1	-84.4
314	TOBACCO	0.5	1.9	0.2	0.3	77.9	4.5	0.6	0.2	0.1	0.0	-95.5	-87.3
321	TEXTILES	5.2	7.7	1.3	1.2	1.5	18.2	4.5	5.1	0.8	1.1	-43.6	-48.3
322	WEARING APPAREL	4.4	8.8	1.5	1.9	-5.5	-62.1	4.2	14.0	1.1	5.2	-51.0	-44.7
323	LEATHER PRODUCTS	16.4	23.3	1.1	1.6	-61.9	-76.0	3.6	17.5	1.9	7.6	121.6	86.9
324	FOOTWEAR	9.4	16.0	0.6	0.9	9.8	-62.6	2.8	5.4	0.3	0.5	5.7	40.1
331	WOOD PRODUCTS	7.5	13.2	2.2	1.0	7.7	-60.3	6.0	5.0	3.5	1.7	-29.1	0.6
332	FURNITURE	1.1	2.4	0.5	0.3	65.5	-36.1	4.4	8.1	0.3	0.2	-88.6	-83.7
341	PAPER	5.9	13.0	2.3	2.6	163.6	12.0	12.0	12.3	2.3	2.1	-49.8	3.6
342	PRINTING AND PUBLISHING	2.6	2.6	1.7	1.1	280.7	142.0	6.7	5.0	0.9	0.7	-67.6	-82.5
351	CHEMICAL INDUSTRIES	12.7	19.1	4.7	5.9	134.7	111.8	34.7	26.0	3.5	4.4	1.0	26.1
352	OTHER CHEMICALS	3.1	3.4	1.7	1.5	164.3	176.9	9.1	7.4	1.6	1.3	-67.1	-78.1
353	PETROLEUM REFINERIES	39.1	26.0	3.4	2.0	16.7	-3.4	24.3	7.2	5.7	4.2	220.1	52.7
354	PETROLEUM AND COAL PRODUCTS	7.4	2.2	2.7	0.9	144.4	44.6	12.7	12.8	0.9	1.8	-57.5	-87.2
355	RUBBER PRODUCTS	2.5	6.0	1.4	2.1	150.2	72.5	9.1	7.8	1.0	1.2	-73.7	-54.9
356	PLASTIC PRODUCTS	2.0	4.3	0.6	0.6	71.2	-9.8	4.5	6.0	0.5	0.5	-78.7	-66.1
361	POTTERY, CHINA AND EARTHENWARE	4.2	14.6	2.0	1.9	128.5	-16.1	14.6	14.2	1.3	1.9	-52.2	8.1
362	GLASS	5.2	7.3	4.0	2.5	249.2	145.1	11.7	8.1	3.3	1.9	-35.8	-43.9
369	OTHER NON-METALLIC MINERALS	2.0	4.7	1.1	0.8	152.3	66.9	5.1	4.0	1.4	0.4	-76.6	-66.6
371	IRON AND STEEL	5.5	18.2	1.8	3.2	42.2	21.4	19.8	13.2	1.8	3.2	-33.7	48.8

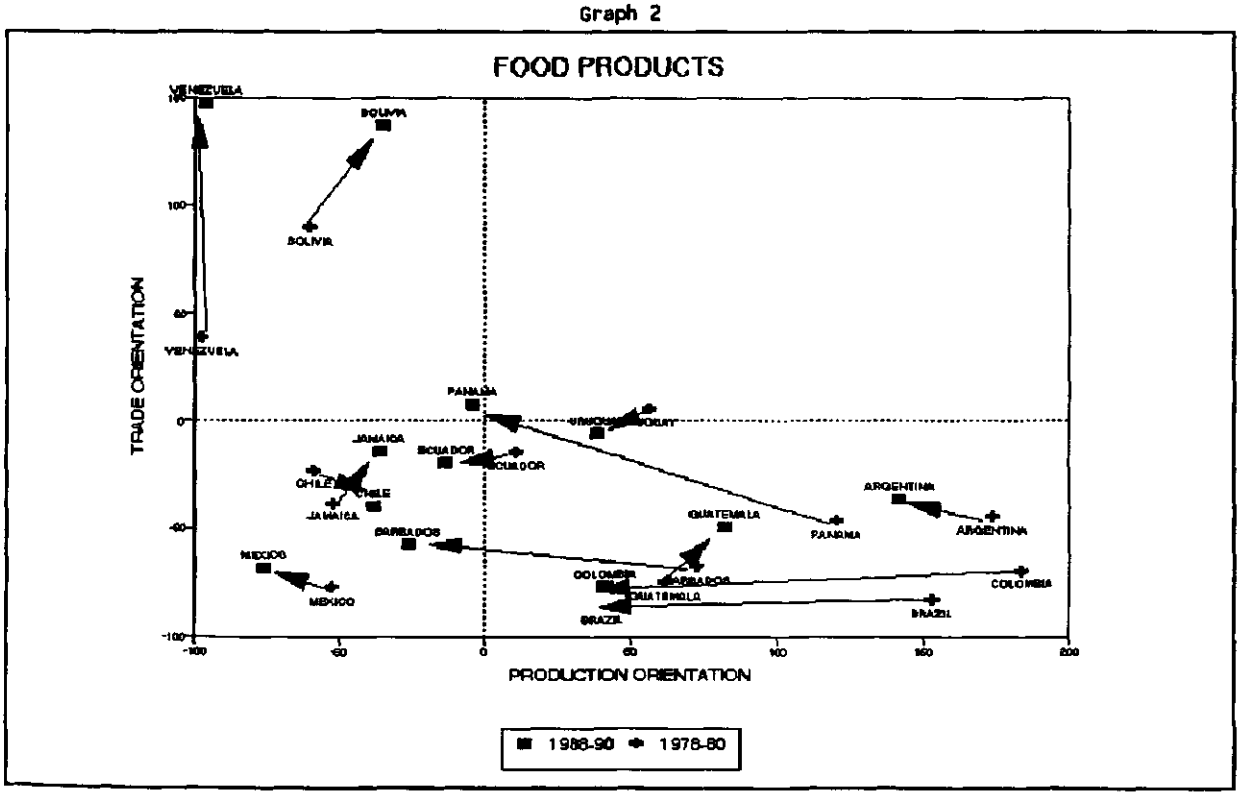
Conclusion table 7

BASIC INDICATOR PER COUNTRY													
		EXPORT PERFORMANCE (X/GPV adj.)				TRADE ORIENTATION (1)		EXTERNAL DEPENDENCY (M/ Demand)				PRODUCTION ORIENTATION (2)	
		WORLD		REGION				WORLD		REGION		WORLD	
	SECTOR	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90	78-80	88-90
372	NON-FERROUS METALS	27.9	39.5	3.4	3.3	8.1	-40.3	28.1	29.3	10.7	9.7	105.4	187.4
381	METAL PRODUCTS	3.1	5.2	1.8	1.6	183.2	101.6	10.7	9.8	0.8	0.9	-65.1	-62.1
382	NON-ELECTRICAL MACHINERY	8.5	16.4	5.8	4.2	187.4	79.0	37.9	44.9	2.7	3.3	-13.9	23.8
383	ELECTRICAL MACHINERY	4.2	8.6	2.2	1.9	187.6	89.1	25.1	26.0	1.9	1.7	-54.4	-35.0
384	TRANSPORT EQUIPMENT	7.2	19.2	2.7	3.4	103.1	54.8	20.7	22.8	1.6	2.5	-13.6	60.8
385	SCIENTIFIC INSTRUMENTS ETC.	10.4	16.0	5.5	4.7	184.2	93.0	52.2	47.0	3.5	2.2	20.5	18.1
390	OTHER MANUFACTURES	8.6	18.5	1.9	3.8	31.8	10.6	14.5	14.0	1.2	1.6	-26.5	13.0

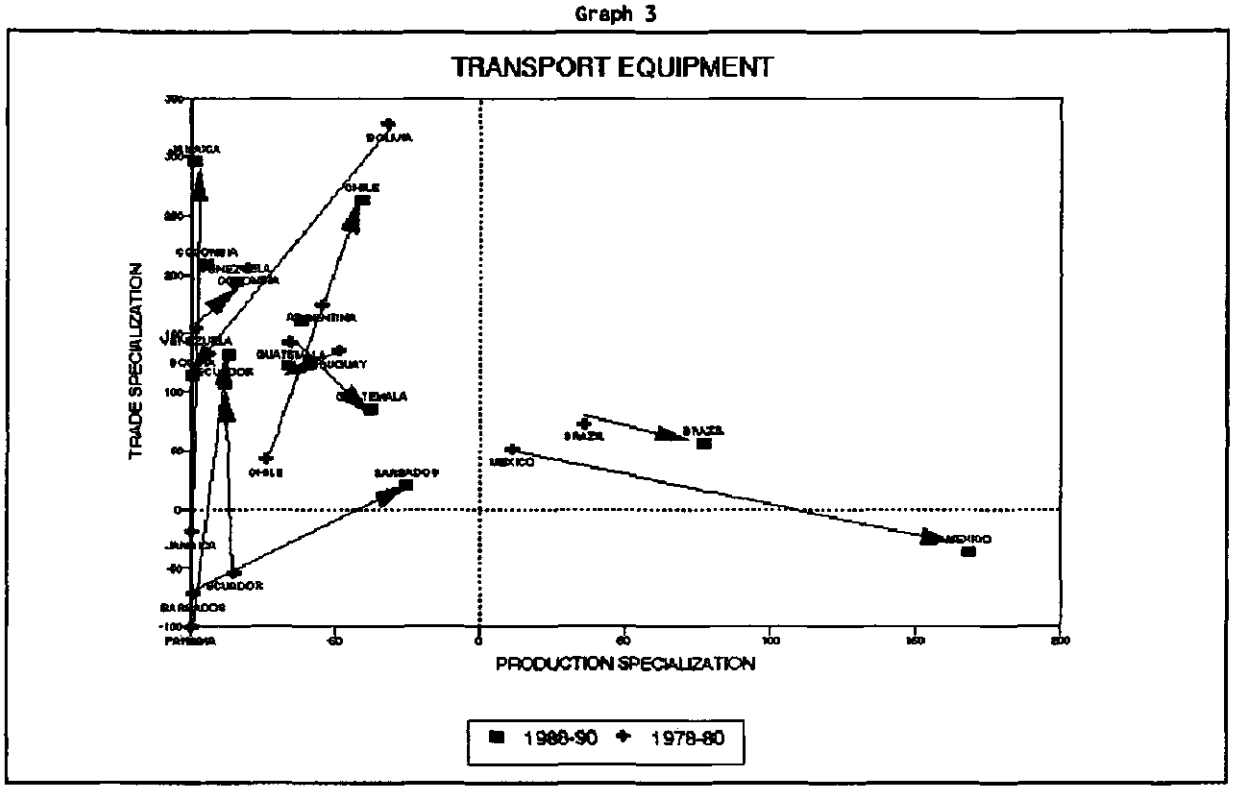
Graph 1



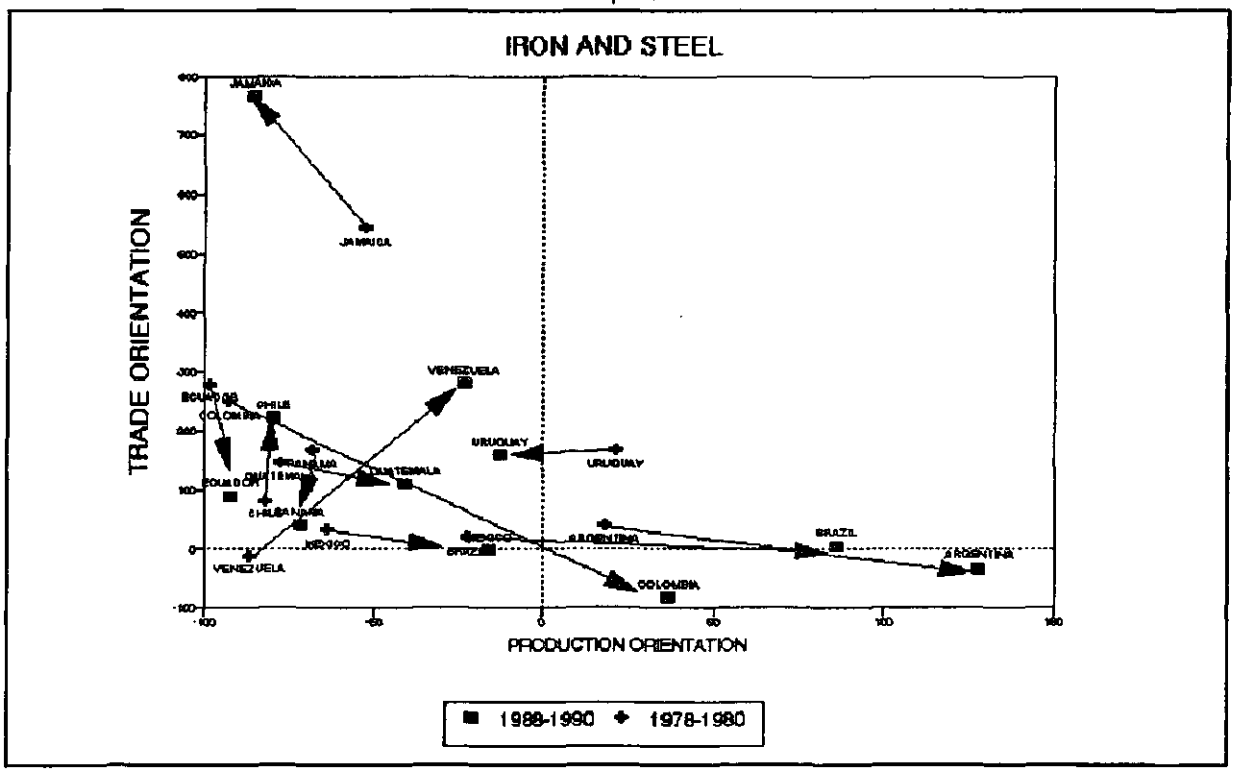
Graph 2



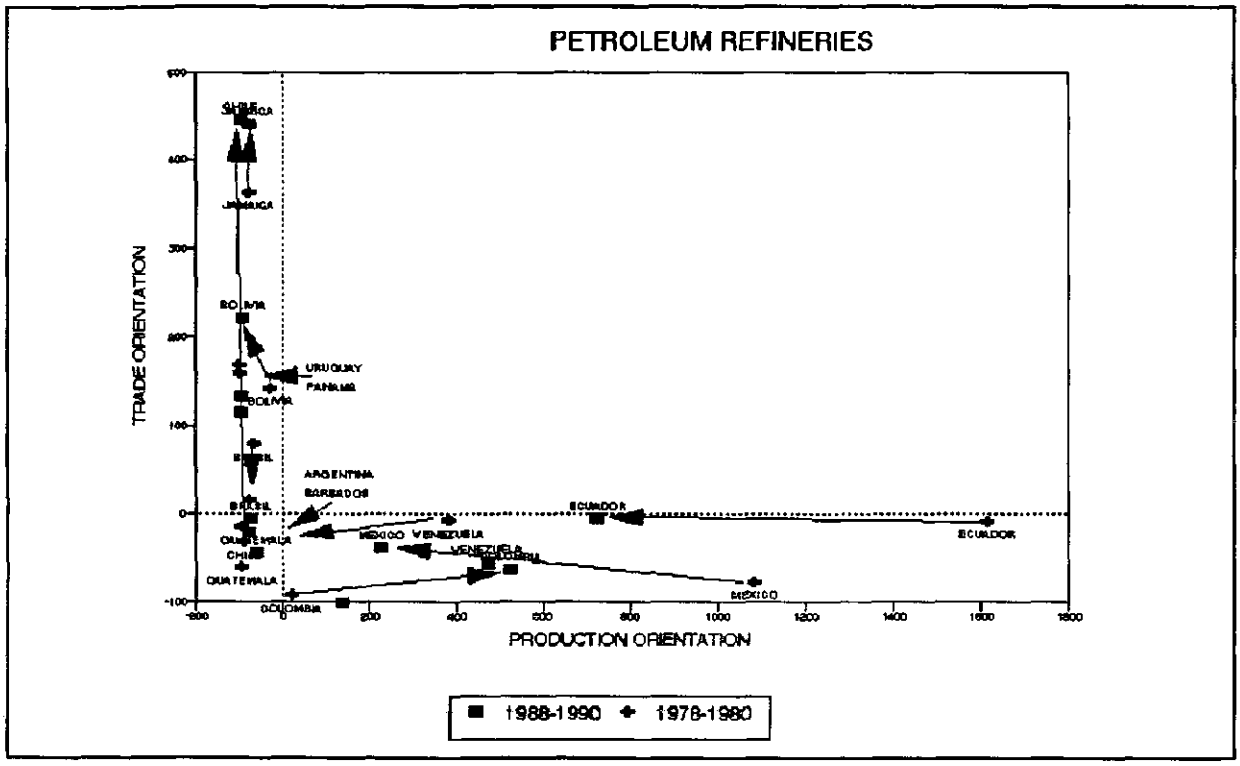
Graph 3



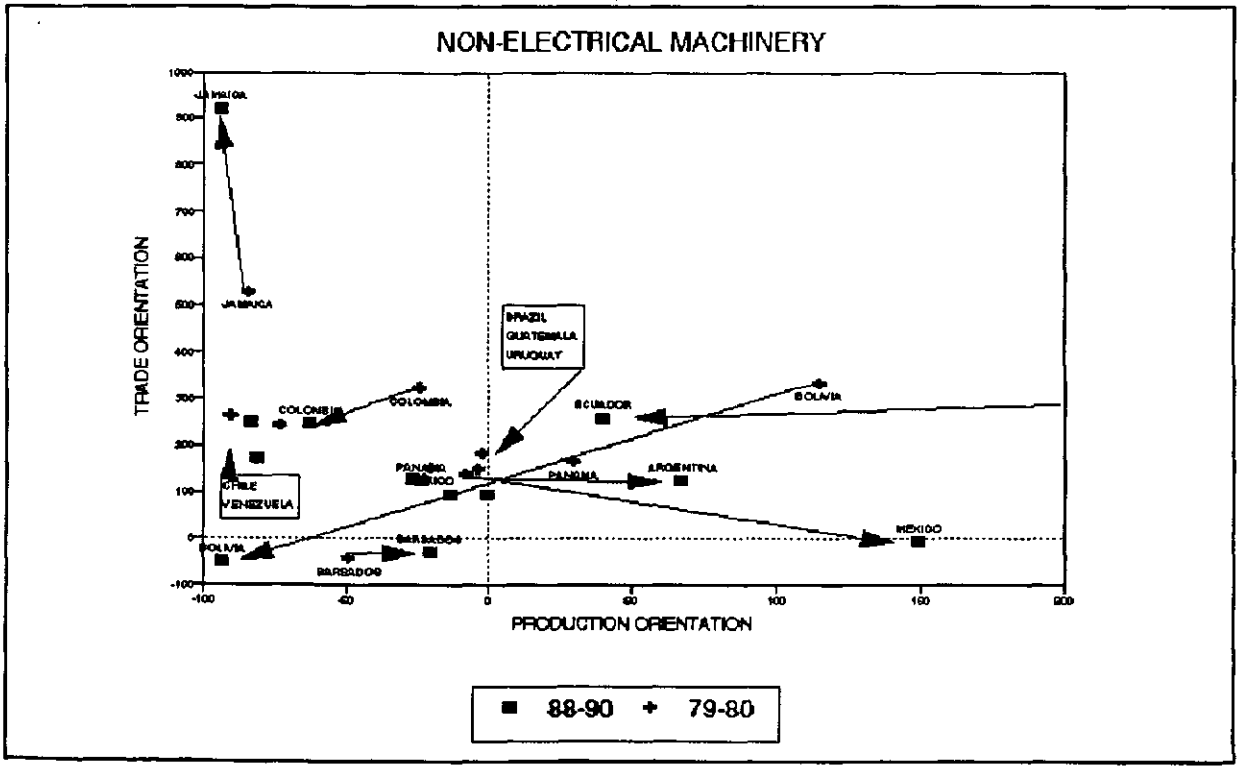
Graph 4



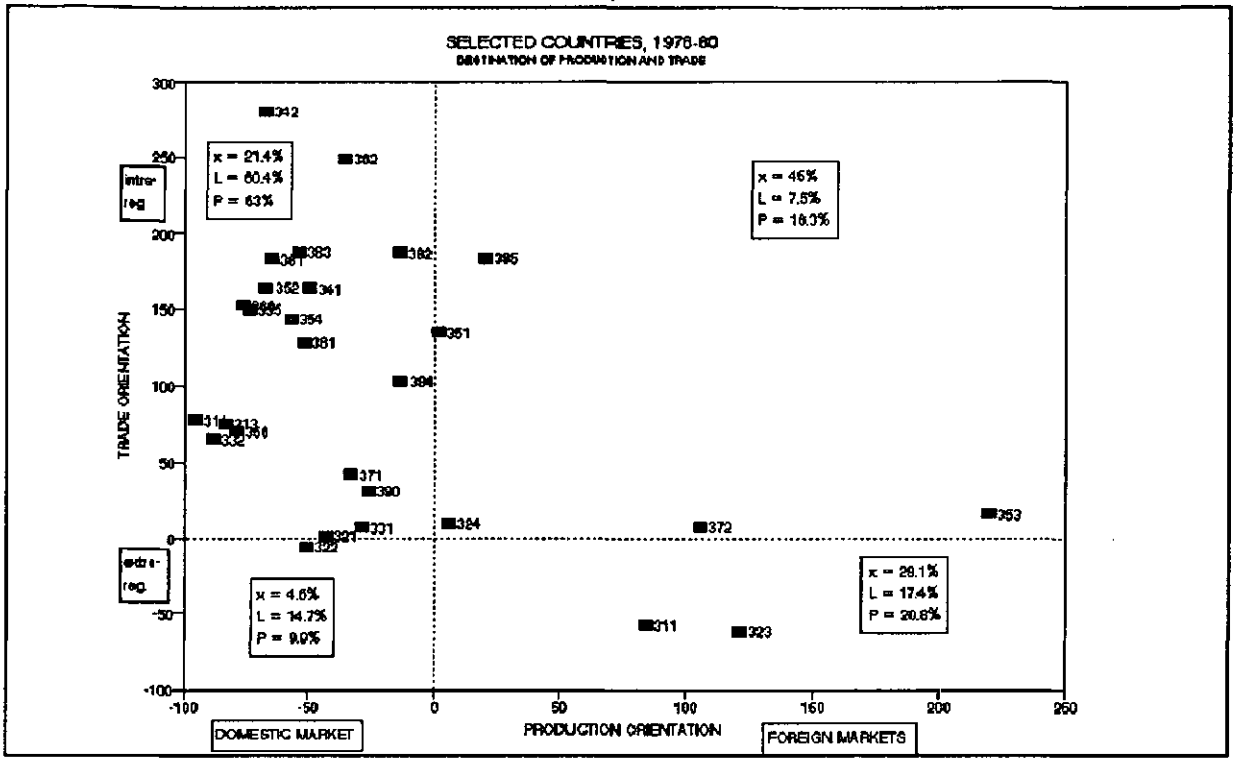
Graph 5



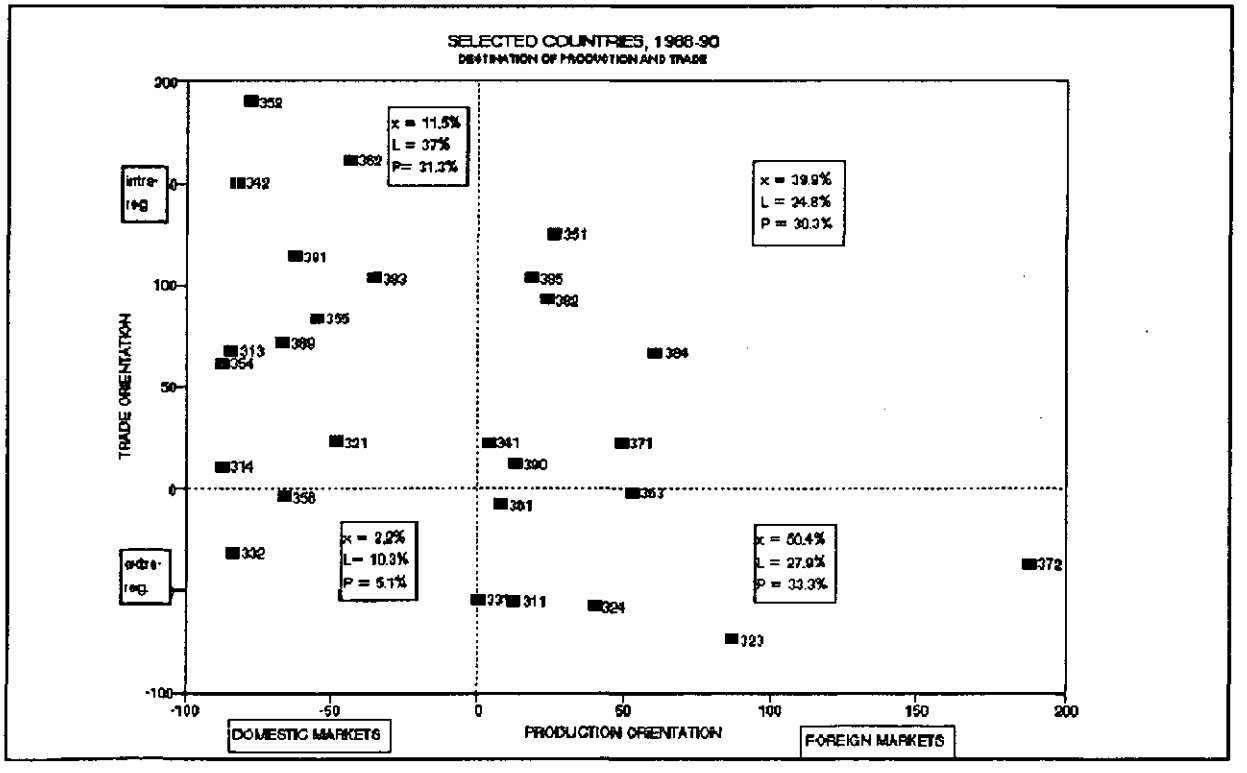
Graph 6



Graph 7



Graph 8



Annex 1

CLASSIFICATION OF COMMODITIES BY INDUSTRIAL ORIGIN
CHAPTER 3: MANUFACTURES

311/12: FOOD PRODUCTS
- 3111 Slaughtering, preparing and preserving meat
- 3112 Manufacture of dairy products
- 3113 Canning and preserving of fruits and vegetables
- 3114 Canning, preserving and processing of fish, crustacea and similar foods
- 3115 Manufacture of vegetable and animal oils and fats
- 3116 Grain mill products
- 3117 Manufacture of bakery products
- 3118 Sugar factories and refineries
- 3119 Manufacture of cocoa, chocolate and sugar confectionery
- 3121 Manufacture of food products not elsewhere classified
- 3122 Manufacture of prepared animal feeds

313: BEVERAGES
- 3131 Distilling, rectifying and blending spirits
- 3132 Wine industries
- 3133 Malt liquors and malt
- 3134 Soft drinks and carbonated waters industries

314: TOBACCO
- 3140 Tobacco manufactures

321: TEXTILES
- 3211 Spinning, weaving and finishing textiles
- 3212 Manufacture of made-up textile goods except wearing apparel
- 3213 Knitting mills
- 3214 Manufacture of carpets and rugs
- 3215 Cordage, rope and twine industries
- 3219 Manufacture of textiles not elsewhere classified

322 WEARING APPAREL
- 3220 Manufacture of wearing apparel, except footwear

323 LEATHER AND LEATHER PRODUCTS EXCEPT FOOTWEAR
- 3231 Tanneries and leather finishing
- 3232 Fur dressing and dyeng industries
- 3233 Manufacture of products of leather and substitutes, except wearing apparel

324 FOOTWEAR
- 3240 Manufacture of footwear, except vulcanized or moulded rubber or plastic footwear

331 WOOD INDUSTRIES
- 3311 Sawmills, planing and other wood mills
- 3312 Manufacture of wooden and cane containers and small cane ware
- 3319 Manufacture of wood and cork products not elsewhere classified

332 FURNITURE
- 3320 Manufacture of furniture and fixtures, except primarily of metal

341 PAPER
- 3411 Manufacture of pulp, paper and paperboard
- 3412 Manufacture of containers and boxes of paper and paperboard
- 3419 Manufacture of pulp, paper and paperboard articles not elsewhere classified

342 PRINTING, PUBLISHING AND ALLIED INDUSTRIES
- 3420 Printing, publishing and allied industries

351 CHEMICAL INDUSTRIES
- 3511 Manufacture of basic industrial chemicals except fertilizers
- 3512 Manufacture of fertilizers and pesticides
- 3513 Manufacture of synthetic resins, plastic materials and man-made fibres except glass

352 OTHER CHEMICAL PRODUCTS
- 3521 Manufacture of paints, varnishes and lacquers
- 3522 Manufacture of drugs and medicines
- 3523 Manufacture of soap and cleaning preparations, perfumes, cosmetics and other toilet preparations
- 3529 Manufacture of chemical products not elsewhere classified

353 PETROLEUM REFINERIES
- 3530 Petroleum refineries

354 MANUFACTURE OF MISCELLANEOUS PRODUCTS OF PETROLEUM AND COAL
- 3540 Manufacture of miscellaneous products of petroleum and coal

355 RUBBER PRODUCTS
- 3551 Tire and tube industries
- 3559 Manufacture of rubber products not elsewhere classified

356 PLASTIC PRODUCTS
- 3560 Manufacture of plastic products not elsewhere classified

361 POTTERY, CHINA AND EARTHENWARE
- 3610 Manufacture of pottery, china and earthenware

362 GLASS
- 3620 Manufacture of glass and glass products

369 OTHER NON - METALLIC MINERALS
- 3691 Manufacture of structural clay products
- 3692 Manufacture of cement, lime and plaster
- 3699 Manufacture of non-metallic mineral products not elsewhere classified

371 IRON AND STEEL BASIC INDUSTRIES
- 3710 Iron and steel basic industries

372 NON - FERROUS METAL BASIC INDUSTRIES
- 3720 Non - ferrous metal basic industries

381 METAL PRODUCTS
- 3811 Manufacture of cutlery, hand tools and general hardware
- 3812 Manufacture of furniture and fixtures primarily of metal
- 3813 Manufacture of structural metal products
- 3819 Manufacture of fabricated metal products except machinery and equipment not elsewhere classified

382 NON - ELECTRICAL MACHINERY
- 3821 Manufacture of engines and turbines
- 3822 Manufacture of agricultural machinery and equipment
- 3823 Manufacture of metal and wood working machinery
- 3824 Manufacture of special industrial machinery and equipment except metal and wood working machinery
- 3825 Manufacture of office, computing and accounting machinery
- 3829 Machinery and equipment except electrical not elsewhere classified

383 ELECTRICAL MACHINERY
- 3831 Manufacture of electrical industrial machinery and apparatus
- 3832 Manufacture of radio, television and communication equipment and apparatus
- 3833 Manufacture of electrical appliances and housewares
- 3839 Manufacture of electrical apparatus and supplies not elsewhere classified

384 TRANSPORT EQUIPMENT
- 3841 Ship building and repairing
- 3842 Manufacture of railroad equipment
- 3843 Manufacture of motor vehicles
- 3844 Manufacture of motorcycles and bicycles
- 3845 Manufacture of aircraft
- 3849 Manufacture of transport equipment not elsewhere classified

385 MANUFACTURE OF SCIENTIFIC AND PROFESSIONAL, AND MEASURING AND CONTROLLING EQUIPMENT
- 3851 Manufacture of professional and scientific, and measuring and controlling equipment, not elsewhere classified
- 3852 Manufacture of photographic and optical goods
- 3853 Manufacture of watches and clocks

390 OTHER MANUFACTURES

- 3901 Manufacture of jewellery and related articles
- 3902 Manufacture of musical instruments
- 3903 Manufacture of sporting and athletic goods
- 3904 Manufacturing industries not elsewhere classified

Annex 2

EXCHANGE RATES AND CURRENCY VALUATION

The transformation of national currency to United States dollars was made using the yearly average IMF "rf" market exchange rates (annex 2, table 1). This will obviously introduce distortions in data for countries that have suffered steep inflation, which by nature occur at some points in time and not equally throughout the year. There is, however, no satisfactory alternative.

If the production data obtained this way were used directly, the analysis would reflect primarily the process of over- and undervaluation of national currencies, a problem present in most countries of the region, especially in the period 1978-1980. ECLAC has designed Indices of Real Effective Exchange Rates (IREER), with base year 1985=100, taking into account the inflation difference between each country and its main trade partners, that allow the visualization of these processes. Nevertheless, it is not deemed satisfactory to simply deflate the data using the indices, because that would imply that the exchange rates in 1985 (or any other base year) were in equilibrium. This would exclude from the data the possible "natural" rate of appreciation or depreciation of the different currencies. The solution adopted consists of the calculation of a trend in the indices between 1978 and 1991, in order to adjust the data by a factor obtained through the division of the actually observed IREER with the estimated trend value for each year (annex 3). The indices of the bilateral relationship between each country and the United States, because the relative fluctuation between the United States dollar and other convertible currencies would introduce new distortions. The time series of the gross production value, value added, and wages were transposed in this way into a kind of "adjusted" current dollar. This adjustment was made before the calculation of the three-year averages, and takes into account the IREER and the estimated trend value for each separate year.

Table 1

EXCHANGE RATES						
COUNTRY	1978	1979	1980	1988	1989	1990
ARGENTINA	0.00008	0.000132	0.000184	8.75	423.34	4876
BARBADOS	2.0113	2.0113	2.0113	2.0113	2.0113	2.0113
BOLIVIA	0.00002	0.00002	0.000025	2.3502	2.6917	3.1727
BRAZIL	0.000018	0.000027	0.000053	0.262	2.834	60.3
CHILE	31.656	37.246	39	245.05	267.16	305.06
COLOMBIA	39.095	42.55	47.28	299.17	382.57	502.26
COSTA RICA	8.57	8.57	8.57	75.805	81.504	91.58
CUBA	1	1	1	1	1	1
DOMINICAN REPUBLIC	1	1	1	6.1125	6.34	8.525
ECUADOR	25	25	25	301.61	526.35	767.75
EL SALVADOR	2.5	2.5	2.5	5	5	8.03
GUATEMALA	1	1	1	2.6196	2.8161	4.4858
GUYANA	2.55	2.55	2.55	10	27.159	39.5
HAITI	5	5	5	5	5	5
HONDURAS	2	2	2	2	2	2
JAMAICA	1.4351	1.7669	1.7814	5.4886	5.7446	7.184
MEXICO	22.767	22.805	22.951	2273.1	2461.5	2812.6
NICARAGUA	7.026	9.255	10.05	270	15655	70500
PANAMA	1	1	1	1	1	1
PARAGUAY	126	126	126	550	1056.22	1229.8
PERU	0.15634	0.22455	0.28865	128.83	2666.19	18790
SURINAME	1.785	1.785	1.785	1.785	1.785	1.785
TRINIDAD AND TOBAGO	2.4	2.4	2.4	3.8438	4.25	4.25
URUGUAY	6.12	7.861	9.099	359.44	605.62	1171
VENEZUELA	4.2925	4.2925	4.2925	14.5	34.681	46.9

Annex 3: Indices of real effective exchange rates, their trends and the adjustment factor

COUNTRY	SERIES	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
ARGENTINA	IREER	55.00	40.00	31.00	47.00	86.00	91.00	86.00	100.00	84.00	86.00	82.00	127.00	77.00	50.00
	TREND	53.80	56.97	60.15	63.32	66.49	69.67	72.84	76.02	79.19	82.36	85.54	88.71	91.88	95.06
	FACTOR	0.98	1.42	1.94	1.35	0.77	0.77	0.85	0.76	0.94	0.96	1.04	0.70	1.19	1.90
BARBADOS	IREER	113.50	111.80	110.90	106.70	102.60	100.80	100.40	100.00	100.60	101.00	100.10	98.80	101.00	99.10
	TREND	110.09	109.06	108.03	106.99	105.96	104.93	103.90	102.86	101.83	100.80	99.76	98.73	97.70	96.66
	FACTOR	0.97	0.98	0.97	1.00	1.03	1.04	1.03	1.03	1.01	1.00	1.00	1.00	0.97	0.98
BOLIVIA	IREER	91.00	77.00	72.00	68.00	119.00	79.00	81.00	100.00	117.00	113.00	116.00	121.00	128.00	124.00
	TREND	73.71	77.82	81.93	86.04	90.15	94.26	98.37	102.48	106.59	110.70	114.81	118.92	123.03	127.14
	FACTOR	0.81	1.01	1.14	1.27	0.76	1.19	1.21	1.02	0.91	0.98	0.99	0.98	0.96	1.03
BRAZIL	IREER	47.00	51.00	63.00	59.00	61.00	84.00	94.00	100.00	92.00	83.00	74.00	63.00	50.00	57.00
	TREND	64.66	65.46	66.26	67.06	67.86	68.66	69.46	70.26	71.06	71.86	72.66	73.46	74.26	75.06
	FACTOR	1.38	1.28	1.05	1.14	1.11	0.82	0.74	0.70	0.77	0.87	0.98	1.17	1.49	1.32
CHILE	IREER	56.00	55.00	49.00	45.00	57.00	71.00	77.00	100.00	102.00	101.00	102.00	99.00	95.00	93.00
	TREND	48.63	53.26	57.89	62.51	67.14	71.77	76.40	81.03	85.66	90.29	94.91	99.54	104.17	108.80
	FACTOR	0.87	0.97	1.18	1.39	1.18	1.01	0.99	0.81	0.84	0.89	0.93	1.01	1.10	1.17
COLOMBIA	IREER	72.00	70.00	70.00	70.00	70.00	74.00	85.00	100.00	117.00	123.00	123.00	131.00	140.00	142.00
	TREND	56.09	62.70	69.31	75.93	82.54	89.15	95.76	102.38	108.99	115.60	122.22	128.83	135.44	142.06
	FACTOR	0.78	0.90	0.99	1.08	1.18	1.20	1.13	1.02	0.93	0.94	0.99	0.98	0.97	1.00
ECUADOR	IREER	66.00	67.00	67.00	64.00	70.00	71.00	100.00	100.00	105.00	117.00	136.00	142.00	147.00	141.00
	TREND	51.34	58.75	66.16	73.57	80.98	88.39	95.80	103.20	110.61	118.02	125.43	132.84	140.25	147.66
	FACTOR	0.78	0.88	0.99	1.15	1.16	1.24	0.96	1.03	1.05	1.01	0.92	0.94	0.95	1.05
GUATEMALA	IREER	107.00	107.00	110.00	109.00	115.00	114.00	115.00	100.00	140.00	172.00	169.00	171.00	203.00	178.00
	TREND	89.34	96.59	103.83	111.07	118.32	125.56	132.81	140.05	147.29	154.54	161.78	169.03	176.27	183.51
	FACTOR	0.83	0.90	0.94	1.02	1.03	1.10	1.15	1.40	1.05	0.90	0.96	0.99	0.87	1.03
JAMAICA	IREER	54.40	58.70	52.70	51.70	51.50	51.70	86.10	100.00	87.20	85.00	81.70	78.30	84.70	98.60
	TREND	50.32	53.81	57.31	60.80	64.29	67.78	71.28	74.77	78.26	81.75	85.24	88.74	92.23	95.72
	FACTOR	0.93	0.92	1.09	1.18	1.25	1.31	0.83	0.75	0.90	0.96	1.04	1.13	1.09	0.97
MEXICO	IREER	85.00	81.00	74.00	68.00	104.00	113.00	100.00	100.00	130.00	131.00	105.00	99.00	95.00	86.00
	TREND	85.97	87.81	89.65	91.49	93.33	95.17	97.01	98.85	100.69	102.53	104.37	106.21	108.05	109.89
	FACTOR	1.01	1.08	1.21	1.35	0.90	0.84	0.97	0.99	0.77	0.78	0.99	1.07	1.14	1.28
PANAMA	IREER	87.30	90.00	89.80	92.30	94.00	95.10	97.60	100.00	102.00	104.80	108.60	113.80	119.00	122.90
	TREND	84.24	86.86	89.47	92.08	94.70	97.31	99.92	102.54	105.15	107.76	110.37	112.99	115.60	118.21

Conclusion Annex 3

COUNTRY	SERIES	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
	FACTOR	0.96	0.97	1.00	1.00	1.01	1.02	1.02	1.03	1.03	1.03	1.02	0.99	0.97	0.96
URUGUAY	IREER	62.00	55.00	44.00	43.00	49.00	84.00	92.00	100.00	87.00	82.00	83.00	82.00	79.00	70.00
	TREND	55.54	58.12	60.69	63.27	65.85	68.42	71.00	73.57	76.15	78.73	81.30	83.88	86.45	89.03
	FACTOR	0.90	1.06	1.38	1.47	1.34	0.81	0.77	0.74	0.88	0.96	0.98	1.02	1.09	1.27
VENEZUELA	IREER	85.00	84.00	79.00	75.00	73.00	83.00	99.00	100.00	114.00	147.00	140.00	165.00	169.00	159.00
	TREND	61.00	68.89	76.78	84.67	92.56	100.45	108.34	116.23	124.12	132.01	139.90	147.79	155.68	163.57
	FACTOR	0.72	0.82	0.97	1.13	1.27	1.21	1.09	1.16	1.09	0.90	1.00	0.90	0.92	1.03